

WHAT IS CLAIMED IS:

1. A method in an FFT system for extending a dynamic range of communication signals in communication devices, comprising the steps of:

obtaining a communications signal, the communication signal comprising a set of data points, the communication signal having a set of signal characteristics;

enabling an output division of the communication signal data points, the output division enabled at each output stage of the FFT system during a first communications signal transmission;

determining a maximum output communication signal sampled during the first signal transmission;

predicting a maximum output signal during a second signal transmission using the signal characteristics of the communication signal during the first communications signal transmission;

calculating a number of unnecessary output divisions for each output stage of the FFT system during the second signal transmission, the number of unnecessary output divisions determined from the predicted maximum output signal during a second signal transmission and from the maximum output communication signal sampled during the first signal transmission; and

disabling selectively the output stage division for at least one output stage of the FFT system during the second signal transmission using the number of unnecessary output divisions determined in the calculating step.